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HABASHI, F. "A Brief History of the Metallurgical Society of the Canadian Institute of Mining, Metallurgy, and Petroleum" (*TMS News*), F. Habashi, October, p. 67.

HALDAR, P. "Advances in Processing and Characterizing Bi-Based Superconductors" (*Overview*), U. Balachandran, R. Jammy, M. Chudzik, A.N. Iyer, and P. Haldar, October, pp. 19–23.

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HAN, H.N. "The Environmental Impact of Steel and Aluminum Body-in-Whites" (*Overview*), H.N. Han, February, pp. 33–38.

HASSON, D.F. "Retrospect," January, p. 80; February, p. 88; March, p. 80; April, p. 80; May, p. 76; June, p. 80; July, p. 80; August, p. 68; September, p. 88; October, p. 80; November, p. 80; December, p. 80.

HAYMAKER, G.T., Jr. "Al and the Dynamics of Change" (*Economics*), G.T. Haymaker, Jr., May, pp. 16–18.

HEENAN, W.M., Jr. Letter to the Editor, July, p. 3.

HEINISCH, H.L. "Atomic-Scale Modeling of Radiation Damage by SAS" (*Overview*), H.L. Heinisch, December, pp. 38–41.

HENDERSON, J. "The Analysis of Ancient Glasses Part II: Luxury Roman and Early Medieval Glasses" (*Archaeotechnology*), J. Henderson, February, pp. 62–64.

HENDRIKS, C. "*Light Metals 1996*: Advances in Aluminum Production" (*Conference Review*), M. Chaubal, C. Hendriks, F. Stevens, and L. Castonguay, November, pp. 21–24.

HERNÁNDEZ, R.F. "The Art of Producing Copper in a Pierce-Smith Converter" (*Metallurgraphics: Special Edition*), R.F. Hernández, August, pp. 39–41.

HOFFMANN, J.E. "The Kennecott Utah Copper Refinery Modernization" (*Overview*), K.E. Sutliff, T.I. Probert, and C.T. Unger (Part I) and J.E. Hoffmann, K.E. Sutliff, B.A. Wells, and D.B. George (Part II), August, pp. 42–44.

HÖGERL, J. "Analyzing the Metallurgical and Cultural Backgrounds of Two Han-Dynasty Bronze-Mirror Fragments" (*Archaeotechnology*), C. Schulten, H.M. Tensi, and J. Högerl, May, pp. 57–59.

HOLLIDAY, M. "Benchmark Testing the Flow and Solidification Modeling of Al Castings" (*Overview*), B. Sirrell, M. Holliday, and J. Campbell, March, pp. 20–23. <http://www.tms.org/pubs/journals/JOM/9603/Sirrell-9603.html>

HOLMES, A.L. "The Luminescence Characteristics of GaN Heteroepitaxial Films" (*Research Summary*), P.A. Grudowski, A.L. Holmes, C.J. Eiting, and R.D. Dupuis, August, pp. 46–49.

HONGERHOLT, D.D. "Using Ultrasonic Sensors for Powder Injection Molding" (*Testing & Analysis*), D.D. Hongerholt, J.L. Rose, and R.M. German, September, pp. 24–28.

HOO, N. "Microstructural Control in a Gamma-TiAl Alloy by MA and HIPing" (*Research Summary*), N. Hoo, P.S. Goodwin, R.M. Brydson, P. Tsakiropoulos, C.M. Ward-Close, and F.H. Froes, July, pp. 40–41.

HOOPUTRA, H. "Analyzing Unidirectional Solidification for a Co-Cr-Mo Biomedical Alloy by FEA" (*Research Summary*), H. Hooputra, H.M. Tensi, H. Mayr, and L. Michaelsen, March, pp. 30–33.

HOSKING, F.M. "The Active Metal Brazing of TZM-Mo and SiN Ceramics" (*Research Summary*), J.J. Stephens, P.T. Vianco, and F.M. Hosking, January, pp. 54–58.

HOYLE, W.C. "Trends and Needs in Can Stock: A Packaging Company's Perspective" (*Industrial Insight*), W.C. Hoyle and F.R. Setlak, November, pp. 33–36.

HU, H. "Inclusions in Molten Magnesium and Potential Assessment Techniques" (*Overview*), H. Hu and A. Luo, October, pp. 47–51.

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JACKSON, M.R. "Joining Ductile Refractory Metal Inserts in X-Ray Tube Targets" (*Design*), M.R. Eggleston, M.R. Jackson, M.G. Benz, and G. Reznikov, January, pp. 59–64.

JAMMY, R. "Advances in Processing and Characterizing Bi-Based Superconductors" (*Overview*), U. Balachandran, R. Jammy, M. Chudzik, A.N. Iyer, and P. Haldar, October, pp. 19–23.

JOHNSON, R.E. Letter to the Editor, October, p. 4.

JONAS, J.J. "Recent Advances in the Thermohydrogen Processing of Titanium Alloys" (*Overview*), O.N. Senkov, J.J. Jonas, and F.H. Froes, July, pp. 42–47.

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KAMAT, R.G. "AA3104 Can-Body Stock Ingot: Characterization and Homogenization" (*Research Summary*), R.G. Kamat, June, pp. 34–38.

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KELLEY, G.H. Letter to the Editor, October, pp. 3–4.

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KENT, R.M. "The In-Situ Sensor-Guided Process Characterization of Advanced Composite Materials" (*Testing & Analysis*), R.M. Kent and M.J. Ruddell, September, pp. 32–34.

KHINA, B.B. "Modeling Mechanical Alloying: Advances and Challenges" (*Overview*), B.B. Khina and F.H. Froes, July, pp. 36–38.

KIM, C.-U. "The Metallurgical Control of Electromigration Failure in Narrow Conducting Lines" (*Overview*), J.W. Morris, Jr., C.-U. Kim, and S.H. Kang, May, pp. 43–46.

KIPOUROS, G.J. "The Processing and Application of Mg and Ti: What's New" (*Commentary*), G.J. Kipouros, October, p. 36.

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KOÇAK, M. "The Fracture Behavior of Diffusion-Bonded

Duplex Gamma TiAl" (*Research Summary*), G. Çam, K.-H. Bohm, J. Müllauer, and M. Koçak, November, pp. 66–68.
KOEBNICK, V., "What Do People Really Do with a Degree in the Materials Field?" (*TMS News*), V. Koebnick and G.L. Liedl, December, pp. 57–58.
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KRUG, H.P. "Evaluating Ceramic-Foam and Bonded-Particle Cartridge Filtration Systems" (*Research Summary*), N.J. Keegan, W. Schneider, H.P. Krug, J. Moritz, M. Stoltz, and V. Dopp, August, pp. 28–30.
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MACCARI, D. "Recovering Metals from Red Mud by Thermal Treatment and Magnetic Separation" (*Research Summary*), P. Plescia and D. Maccari, January, pp. 25–28.
MACKINTOSH, C. "A Profile of the South African Institute of Mining and Metallurgy" (*TMS News*), C. Mackintosh, April, pp. 67–68.
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MALAS, J.C. "The Simulation of Acoustic Emission for Metal Forging" (*Testing & Analysis*), W.M. Mullins, R.D. Irwin, S. Venugopal, and J.C. Malas, September, pp. 35–37.
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MANRIQUE, M. "Investigating the Thermal-Plasma Processing of Advanced Materials" (*Overview*), P.R. Taylor and M. Manrique, June, pp. 43–45.
MANSUR, L.K. "The Reaction Rate Theory of Radiation Effects" (*Overview*), L.K. Mansur, December, pp. 28–32.
MARCUSON, S.W. "Oxygen Pyrometallurgy at Copper Cliff—A Half Century of Progress" (*Industrial Insight*), P.E. Queneau and S.W. Marcuson, January, pp. 14–21. <http://www.tms.org/pubs/journals/JOM/9601/Queneau-9601.html>
MARKOVSKY, P.E. "Enhancing the Mechanical Properties of Titanium Alloys with Rapid Heat Treatment" (*Overview*), O.M. Ivasishin and P.E. Markovsky, July, pp. 48–52.
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MARTÍNEZ GARCIA, J.A. "Roman-Era Copper Production at the Cerro Muriano Smelter" (*Archaeotechnology*), R. Calabrés Molina, A.J. Criado Portal, J.A. Martínez Garcia, and J.J. Storch de Gracia, September, pp. 68–70.
MATOUSEK, J.W. "Estimating the Oxygen Potentials of Metallurgical Slags" (*Overview*), J.W. Matousek, December, pp. 52–53.
MATTOX, D. Review of the book *Materials for Electronic Packaging* (*News & Update*), June, p. 11.
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McBRIDE, J.K. "The Development of 5XXX Aluminum Alloys for RCS Applications" (*Overview*), J.K. McBride, R.E. Sanders, Jr., and H.G. Reavis, June, pp. 18–21.
McCORMACK, M.T. "A Lower-Melting-Point Solder Alloy for Surface Mounts" (*Research Summary*), M.T. McCormack, Y. Degani, H.S. Chen, and W.R. Gesick, May, pp. 54–56. <http://www.tms.org/pubs/journals/JOM/9605/McCormack-9605.html>
McMAHON, M.E. "Analyzing Superplastic Microstructures Using Interactive EBSP Methods" (*Testing & Analysis*), T.R. McNelley and M.E. McMahon, February, pp. 58–60.
McNELLEY, T.R. "Analyzing Superplastic Microstructures Using Interactive EBSP Methods" (*Testing & Analysis*), T.R. McNelley and M.E. McMahon, February, pp. 58–60.
MEISEN, A. "Global Trends in Engineering Practice and Education" (*Education*), A. Meisen, August, pp. 16–19.
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MORRAL, F.R. Review of the book *Magnetism and Magnetic Materials* (*Division News*), March, insert.
MORRIS, A. "Software for Process Analysis and Design," Sidebar to "Recycling of Metals and Engineered Materials" (*Conference Review*), A. Morris and D. Robertson, March, p. 44.
MORRIS, J.G. "Developments in the Packaging of Aluminum Alloys" (*Commentary*), J.G. Morris, June, p. 17.
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OCAMPO, F. "The New Engineering Accreditation Process in Mexico" (*Education*), F. Ocampo, October, pp. 16–17.
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O'CONNOR, M. "I'm at Your Service—Director of Meetings & Member Services" (*TMS News*), M. O'Connor, March, p. 68.
OLPER, M. "Electric Car Batteries: Avoiding the Environmental Drawbacks via Alternative Technologies" (*Overview*), H. Warlimont and M. Olper, July, pp. 32–34.
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PETERSON, G.D. "Engineering Criteria 2000: The ABET Vision for Change" (*Education*), G.D. Peterson, September, pp. 12–14.
PETERSON, R.D. "Recycling of Metals and Engineered Materials" (*Conference Review*), R.D. Peterson and L.G. Twidwell, March, pp. 43–44.
PETEVES, S.D. "Joining Silicon Nitride to Itself and to Metals" (*Overview*), S.D. Peteves, G. Ceccone, M. Paulasto, V. Stamos, and P. Yvon, January, pp. 48–52, 74–77.
PETRUK, W. "Process Mineralogy: The Year in Review" (*Division News*), W. Petruk, April, insert.
PFENDER, E. "Advances in the Computational Modeling of Thermal-Plasma Processing" (*Overview*), C.H. Chang and E. Pfender, June, pp. 46–48.
PHOENIX, S.L. "The Micromechanical Modeling of Polymeric Composites" (*Overview*), T.-W. Chou, S.L. Phoenix, and J.A. Nairn, September, pp. 53–57.
PICKLES, C.A. Review of the book *Foundations and Industrial Applications of Microwaves and Radio Frequency Fields: Physical and Chemical Processes* (*Division News*), September, insert.
PICKLES, C.A. Review of the book *Materials Used in the Hall-Héroult Cell for Aluminum Production* (*Division News*), November, insert.
PICKLES, C.A. Review of the book *Steelmakers and Knotted String* (*Division News*), August, insert.
PLESCIA, P. "Recovering Metals from Red Mud by Thermal Treatment and Magnetic Separation" (*Research Summary*), P. Plescia and D. Maccari, January, pp. 25–28.
PLETKA, B. "Mathematically Modeling Mesoscale Microstructural Evolution" (*Commentary*), B. Pletka and L.Q. Chen, December, p. 12.
PLUMEYER, M.J. LETTER TO THE EDITOR, October, p. 3.
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PRASAD, Y.V.R.K. "Hot-Deformation Mechanisms in Near-Alpha Titanium Alloy 685" (*Research Summary*), V. Gopala Krishna, Y.V.R.K. Prasad, N.C. Birla, and G. Sambasiva Rao, October, pp. 56–59.
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PROBERT, T.I. "The Kennecott Utah Copper Refinery Modernization" (*Overview*), K.E. Sutliff, T.I. Probert, and C.T. Unger (Part I) and J.E. Hoffmann, K.E. Sutliff, B.A. Wells, and D.B. George (Part II), August, pp. 42–44.

Q

QUENEAU, P.E. "Industrial-Scale Leadmaking with the QSL Continuous Oxygen Converter" (*1996 Review of Extraction & Processing*), P.E. Queneau and A. Siegmund, April, pp. 38–44.

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"A Steel Response to 'The Environmental Impact of Steel and Aluminum Body-in-Whites'," R. Dworek, July, p. 31.
"The Single-Step Preheating of AA3104 Can-Body Stock Ingots" (*Research Summary*), S.L. Palmer and Z. Li, June, pp. 30–33.
"Trends and Needs in Can Stock: A Packaging Company's Perspective" (*Industrial Insight*), W.C. Hoyle and F.R. Sedlak, November, pp. 33–36.
"Using Grain Boundary Mobility to Characterize Aluminum Purity" (*Testing & Analysis*), D.A. Molodov, U. Czubayko, G. Gottstein, and L.S. Shvindlerman, February, pp. 30–31.

Aqueous Processing

"Developments in Physical Chemistry and Basic Principles" (*1996 Review of Extraction & Processing*), H.Y. Sohn and W.D. Cho, April, pp. 56–61.
"Electric Car Batteries: Avoiding the Environmental Drawbacks via Alternative Technologies" (*Overview*), H. Warlimont and M. Olper, July, pp. 32–34.
"Placid—A Clean Process for Recycling Lead from Batteries" (*Overview*), G. Díaz and D. Andrews, January, pp. 29–31.
"Recovering Metals from Red Mud by Thermal Treatment and Magnetic Separation" (*Research Summary*), P. Plescia and D. Maccari, January, pp. 25–28.
"Simultaneous Oxidation and Stripping for Separating Se and Te from Sulfur" (*Research Summary*), H.K. Lin, March, pp. 50–52.

Archaeotechnology and History

"Alumina Production in Russia Part I: Historical Background" (*Overview*), V. Smirnov, August, pp. 24–26. <http://www.tms.org/pubs/journals/JOM/9608/Smirnov-9608.html>
"The Analysis of Ancient Glasses Part II: Luxury Roman and Early Medieval Glasses" (*Archaeotechnology*), J. Henderson, February, pp. 62–64.
"Analyzing the Metallurgical and Cultural Backgrounds of Two Han-Dynasty Bronze-Mirror Fragments" (*Archaeotechnology*), C. Schulten, H.M. Tensi, and J. Högerl, May, pp. 57–59.
"Archaeometallurgy and the Analysis of Early Sociotechnical Systems" (*Archaeotechnology*), R.M. Ehrenreich, July, pp. 62–63.
"Argonne National Laboratory: Celebrating 50 Years of Research" (*Metallurgraphics*), T.M. Beazley, July, p. 64.
"A Brief History of Composites in the U.S.—The Dream and the Success" (*Historical Insight*), E.P. Scala, February, pp. 45–48. <http://www.tms.org/pubs/journals/JOM/9602/Scala-9602.html>
"It Started in Wilkes-Barre—AIME Celebrates 125th Anniversary" (*History*), T.M. Beazley, February, pp. 16–17.
"Mining Communities in History: An Industrial Legacy" (*Archaeotechnology*), R.M. Ehrenreich, December, pp. 54–56.
"Oxygen Pyrometallurgy at Copper Cliff—A Half Century of Progress" (*Industrial Insight*), P.E. Queneau and S.W. Marcuson, January, pp. 14–21. <http://www.tms.org/pubs/journals/JOM/9601/Queneau-9601.html>
"Retrospect," January, p. 80; February, p. 88; March, p. 80; April, p. 80; May, p. 76; June, p. 80; July, p. 80; August, p. 68; September, p. 88; October, p. 80; November, p. 80; December, p. 80.
"Roman-Era Copper Production at the Cerro Muriano Smelter" (*Archaeotechnology*), R. Calabrés Molina, A.J. Criado Portal, J.A. Martínez Garcia, and J.J. Storch de Gracia, September, pp. 68–70.
"The Selection, Specification, and Performance of Metals in Architecture" (*Metallurgraphics: Special Edition*), L.W. Zahner, March, pp. 14–15.

The Arts

"Bessie Bessemer Furnace and Old Man Steel Re-educate with Performance Steelmaking" (*Metallurgraphics: Special Edition*), T.M. Beazley, October, pp. 12–14. <http://www.tms.org/pubs/journals/JOM/9610/Beazley-9610.html>
"Needed: Materials for 24th Century Starships—Considering the Materials Demands of the Star Trek Universe" (*Featured Overview*), A. Bormanis, June, pp. 14–16. <http://www.tms.org/pubs/journals/JOM/9606/Bormanis-9606.html>
"Using Stainless Steel to Portray a Slice of American History" (*Metallurgraphics*), T.M. Beazley, June, p. 60.

Book Reviews

Review of the book *Advances in Powder Metallurgy and Particulate Materials—1993* (*Division News*), January, insert.
Review of the book *Advances in Powder Metallurgy and Particulate Materials—1994 (volumes 1–7)* (*Division News*), June, insert.
Review of the book *Aluminum Structures: A Guide to Their Specifications and Design* (*News & Update*), June, p. 8.
Review of the book *Diamond: Electronic Properties and Applications* (*News & Update*), April, p. 10.
Review of the book *Fabrication, Properties, and Applications of Low-Dimensional Semiconductors* (*Division News*), October, insert.
Review of the book *Foundations and Industrial Applications of Microwaves and Radio Frequency Fields: Physical and Chemical Processes* (*Division News*), September, insert.
Review of the book *The Internet for Scientists and Engineers* (*Net Trans*), June, p. 13.
Review of the book *Investment Casting* (*Division News*), September, insert.
Review of the book *Light Alloys—Metallurgy of the Light Metals* (*Division News*), November, insert.
Review of the book *Magnetism and Magnetic Materials* (*Division News*), March, insert.

Review of the book *Materials for Electronic Packaging* (*News & Update*), June, p. 11.
Review of the book *Materials Used in the Hall-Héroult Cell for Aluminum Production* (*Division News*), November, insert.
Review of the book *Mechanics of Composite Materials* (*Division News*), June, insert.
Review of the book *Modifications of Passive Films—European Federation of Corrosion Publications Number 12* (*Division News*), February, insert.
Review of the book *Molecular Beam Epitaxy—Applications to Key Materials* (*News & Update*), April, p. 10.
Review of the book *The Molecular Dynamics of Liquid Crystals* (*Division News*), March, insert.
Review of the book *Nanophase Materials—Synthesis, Properties, Applications* (*Division News*), February, insert.
Review of the book *Powder Metallurgy Science* (*Division News*), February, insert.
Review of the book *Principles of Ceramics Processing, Second Edition* (*Division News*), February, insert.
Review of the book *Resources of the Earth: Origin, Use, and Environmental Impact, Second Edition* (*Division News*), August, insert.
Review of the book *The Science and Engineering of Thermal Spray Coatings* (*Forum Features*), June, p. 69.
Review of the book *Steelmakers and Knotted String* (*Division News*), August, insert.
Review of the book *Strength and Fracture Engineering Solids, 2nd ed.* (*Forum Features*), March, p. 71.

Ceramics & Polymers

"The Active Metal Brazing of TZM-Mo and SiN Ceramics" (*Research Summary*), J.J. Stephens, P.T. Vianco, and F.M. Hosking, January, pp. 54–58.
"Investigating the Thermal-Plasma Processing of Advanced Materials" (*Overview*), P.R. Taylor and M. Manrique, June, pp. 43–45.
"Joining Silicon Nitride to Itself and to Metals" (*Overview*), S.D. Peteves, G. Ceccone, M. Paulasto, V. Stamos, and P. Yvon, January, pp. 48–52, 74–77.
"A Model for Predicting Micromechanical Interfacial Adhesion in Polymer Composites" (*Testing & Analysis*), H.F. Wu, W. Gu, and G.-Q. Lu, September, pp. 58–61.
"The Monotonic and Fatigue Behavior of CFCCs" (*Overview*), N. Miriyala and P.K. Liaw, September, pp. 44–52.
"Steel vs. Plastics: The Competition for Light-Vehicle Fuel Tanks" (*Overview*), P.J. Alvarado, July, pp. 22–25. <http://www.tms.org/pubs/journals/JOM/9607/Alvarado-9607.html>

Characterization

"Advances in Processing and Characterizing Bi-Based Superconductors" (*Overview*), U. Balachandran, R. Jammy, M. Chudzik, A.N. Iyer, and P. Haldar, October, pp. 19–23.
"Characterizing and Etching Blue-Light Emitting Semiconductor Materials" (*Commentary*), J.M. Parsey, Jr., and M.S. Goorsky, August, p. 45.
"The Dry Etching of Group III-Nitride Wide-Bandgap Semiconductors" (*Overview*), H.P. Gillis, D.A. Choutov, and K.P. Martin, August, pp. 50–55.
"The In-Situ Sensor-Guided Process Characterization of Advanced Composite Materials" (*Testing & Analysis*), R.M. Kent and M.J. Ruddell, September, pp. 32–34.
"The Luminescence Characteristics of GaN Heteroepitaxial Films" (*Research Summary*), P.A. Grudowski, A.L. Holmes, C.J. Eiting, and R.D. Dupuis, August, pp. 46–49.
"Microscopic Studies on Hydrogen Effects on Mechanical Properties" (*Overview*), I.M. Robertson and D. Teter, November, pp. 55–60.
"Percolative Current Flow in High-J_c, Polycrystalline High-T_c Superconductors" (*Overview*), A. Goyal, E.D. Specht, D.K. Christen, D.M. Kroeger, A. Pashitski, A. Polyanskii, and D.C. Larbalestier, October, pp. 24–29.

Composite Materials

"Analyzing the Methods and Merits of Recycling Fiber Metal Laminates" (*1996 Review of Extraction & Processing*), E. Tempelman, W.L. Dalmijn, and A. Vlot, April, pp. 62–64.
"A Brief History of Composites in the U.S.—The Dream and the Success" (*Historical Insight*), E.P. Scala, February, pp. 45–48. <http://www.tms.org/pubs/journals/JOM/9602/Scala-9602.html>
"The Fracture Resistance and Crack-Tip Micromechanics of In-Situ Intermetallic Composites" (*Research Summary*), K.S. Chan and D.L. Davidson, September, pp. 62–67.
"High-Performance Composites: Commonalty of Phenomena" (*Conference Review*), K.K. Chawla, P.K. Liaw, and S.G. Fishman, February, pp. 43–44.
"High-Strain-Rate Superplasticity in Aluminum-Matrix Composites" (*Overview*), T.R. Bieler, R.S. Mishra, and A.K. Mukherjee, February, pp. 52–57.
"High-Temperature Refractory Metal-Intermetallic Composites" (*Overview*), M.R. Jackson, B.P. Bewlay, R.G. Rowe, D.W. Skelly, and H.A. Lipsitt, January, pp. 39–44.
"The In-Situ Sensor-Guided Process Characterization of Advanced Composite Materials" (*Testing & Analysis*), R.M. Kent and M.J. Ruddell, September, pp. 32–34.
"The Micromechanical Modeling of Polymeric Composites" (*Overview*), T.-W. Chou, S.L. Phoenix, and J.A. Nairn, September, pp. 53–57.
"MMCs for Automotive Engine Applications" (*Economics*), C.G.E. Mangin, J.A. Isaacs, and J.P. Clark, February, pp. 49–51.
"A Model for Predicting Micromechanical Interfacial Adhesion in Polymer Composites" (*Testing & Analysis*), H.F. Wu, W. Gu, and G.-Q. Lu, September, pp. 58–61.
"Modeling the Micromechanical Aspects of Composites" (*Commentary*), P.K. Liaw and N. Yu, September, p. 43.
"The Monotonic and Fatigue Behavior of CFCCs" (*Overview*), N. Miriyala and P.K. Liaw, September, pp. 44–52.
"The Thermal Plasma Near-Net-Shape Spray Forming of Al Composites" (*Research Summary*), M. Smagorinski, P. Tsantrizos, S. Grenier, M. Entezarian, and F. Ajersch, June, pp. 56–59.

Conference Reviews

"Aluminum Cast House Technology" (*Conference Review*), M. Nilmani and P. Whiteley, May, pp. 13–14.
"The Eighth World Titanium Conference" (*Conference Review*), F.H. Froes, July, pp. 59–61.
"High-Performance Composites: Commonalty of Phenomena" (*Conference Review*), K.K. Chawla, P.K. Liaw, and S.G. Fishman, February, pp. 43–44.
"Inorganic Ion-Exchange Materials" (*Conference Review*), R.P. Singh, August, p. 38.
"*Light Metals 1996*: Advances in Aluminum Production" (*Conference Review*), M. Chaubal, C. Hendriks, F. Stevens, and L. Castonguay, November, pp. 21–24.
"Mining Communities in History: An Industrial Legacy" (*Archaeotechnology*), R.M. Ehrenreich, December, pp. 54–56.
"Process Mineralogy: The Year in Review" (*Division News*), W. Petruk, April, insert.
"Recycling of Metals and Engineered Materials" (*Conference Review*), R.D. Peterson and L.G. Twidwell, March, pp. 43–44.
"A Sampling of Highlights from the *EPD Congress 1996*" (*1996 Review of Extraction & Processing*), M.E. Schlesinger, April, pp. 50–54. <http://www.tms.org/pubs/journals/JOM/9604/Schlesinger-9604.html>

Copper, Nickel, Cobalt

"The Art of Producing Copper in a Pierce-Smith Converter" (*Metallurgraphics: Special Edition*), R.F. Hernández, August, pp. 39–41.
"Events and Trends in Metal and Mineral Commodities" (*1996 Review of Extraction & Processing*), T.M. Beazley, April, pp. 45–49.
"The Kennecott Utah Copper Refinery Modernization" (*Overview*), K.E. Sutliff, T.I. Probert, and C.T. Unger (Part I) and J.E. Hoffmann, K.E. Sutliff, B.A. Wells, and D.B. George (Part II), August, pp. 42–44.
"Nitrogen-Atomized, Nickel-Based, Corrosion-Resistant Alloys" (*Research Summary*), F.J. Rizzo, April, pp. 24–27.
"Oxygen Pyrometallurgy at Copper Cliff—A Half Century of Progress" (*Industrial Insight*), P.E. Queneau and S.W. Marcuson, January, pp. 14–21. <http://www.tms.org/pubs/journals/JOM/9601/Queneau-9601.html>

Corrosion & Environmental Effects

"The Corrosion of Refractories by Molten Aluminum" (*Research Summary*), S. Afshar and C. Allaire, May, pp. 23–27.
"Enhancing the Corrosion Resistance of Metals by Laser Processing" (*Research Summary*), J. Barnikel, T. Seefeld, A. Emmel, E. Schubert, and H.W. Bergmann, May, pp. 29–32.
"Erosion Studies on Duplex and Graded Ceramic Overlay Coatings" (*Research Summary*), S. Usmani and S. Sampath, November, pp. 51–54.
"The Fatigue and Fracture of Turbine Blade Alloys in High-Pressure Hydrogen" (*Research Summary*), D.P. DeLuca and B.A. Cowles, November, pp. 61–64.
"High-Nitrogen Austenitic Stainless Steels with High Strength and Corrosion Resistance" (*Design*), G.O. Rhodes and J.J. Conway, April, pp. 28–31.
"The In-Service Degradation of Corrosion-Resistant Coatings" (*Research Summary*), N.S. Cheruvu, T.J. Carr, J. Dworak, and J. Coyle, May, pp. 34–38.
"Nitrogen-Atomized, Nickel-Based, Corrosion-Resistant Alloys" (*Research Summary*), F.J. Rizzo, April, pp. 24–27.
"The Oxidation and Protection of Gamma Titanium Aluminides" (*Overview*), M.P. Brady, W.J. Brindley, J.L. Smialek, and I.E. Locci, November, pp. 46–50.
"Reviewing Sulfidation Corrosion—Yesterday and Today" (*Overview*), N.S. Bornstein, November, pp. 37–39.
"The SCC Testing of Nuclear Steam Generator Tubing Materials" (*Research Summary*), P.E. Doherty, J.M. Sarver, and B.P. Miglin, May, pp. 39–41.

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"The Fatigue and Fracture of Turbine Blade Alloys in High-Pressure Hydrogen" (*Research Summary*), D.P. DeLuca and B.A. Cowles, November, pp. 61–64.
"The Fracture Behavior of Diffusion-Bonded Duplex Gamma TiAl" (*Research Summary*), G. Çam, K.-H. Bohm, J. Müllauer, and M. Koçak, November, pp. 66–68.
"The Fracture Resistance and Crack-Tip Micromechanics of In-Situ Intermetallic Composites" (*Research Summary*), K.S. Chan and D.L. Davidson, September, pp. 62–67.
"High-Strain-Rate Superplasticity in Aluminum-Matrix Composites" (*Overview*), T.R. Bieler, R.S. Mishra, and A.K. Mukherjee, February, pp. 52–57.
"Hot-Deformation Mechanisms in Near-Alpha Titanium Alloy 685" (*Research Summary*), V. Gopala Krishna, Y.V.R.K. Prasad, N.C. Birla, and G. Sambasiva Rao, October, pp. 56–59.
"The Monotonic and Fatigue Behavior of CFCCs" (*Overview*), N. Miriyala and P.K. Liaw, September, pp. 44–52.

Division News

"Electronic Materials Committee Sponsors Electronic Materials Conference" (*EMPMD Edition*), March.
"Electronic Materials Committee Sponsors Popular Electronic Materials Conference" (*EMPMD Edition*), October.
"EMPMD Initiates Student Travel Fellowships" (*EMPMD Edition*), March.
"EPD Council Meets in Anaheim" (*EPD Edition*), April.
"Chemistry and Physics of Materials Committee" (*EMPMD Edition*), October.
"Gordon Conference in Metallurgy Focuses on Materials Modeling" (*EMPMD Edition*), March.
"High-Temperature Materials Advances Shape a New Mission for the Refractory Metals and Materials Committee" (*Division News*), J. Wittenauer, January.
"Letter from the EMPMD Chair" (*Division News*), D.R. Frear, March.
"A Letter from the EMPMD Chair" (*Division News*), D.R. Frear, October.
"LMD Announces Plans for 1997 TMS Annual Meeting in Orlando" (*LMD Edition*), November.
"LMD Council Meets in Anaheim" (*LMD Edition*), May.
"LMD Recognizes Award Winners at LMD Luncheon and Appreciation Reception" (*LMD Edition*), May.
"Materials Design Contest Undergoes Transformation" (*MDMD Edition*), February.
"MDMD Cancels Megatrends in Manufacturing Symposium" (*MDMD Edition*), February.
"MDMD Prepares for Materials Week and Annual Meeting Symposia" (*MDMD Edition*), September.
"A Personal Tribute to Julian Szekely" (*Division News*), H.Y. Sohn, April.
"Process Mineralogy: The Year in Review" (*Division News*), W. Petruk, April.
Review of the book *Advances in Powder Metallurgy and Particulate Materials—1993* (*Division News*), January.
Review of the book *Advances in Powder Metallurgy and Particulate Materials—1994* (*volumes 1–7*) (*Division News*), June.
Review of the book *Fabrication, Properties, and Applications of Low-Dimensional Semiconductors* (*Division News*), October.
Review of the book *Foundations and Industrial Applications of Microwaves and Radio Frequency Fields: Physical and Chemical Processes* (*Division News*), September.
Review of the book *Investment Casting* (*Division News*), September.
Review of the book *Light Alloys—Metallurgy of the Light Metals* (*Division News*), November.
Review of the book *Magnetism and Magnetic Materials* (*Division News*), March.
Review of the book *Materials Used in the Hall-Héroult Cell for Aluminum Production* (*Division News*), November.
Review of the book *Mechanics of Composite Materials* (*Division News*), June.
Review of the book *Modifications of Passive Films—European Federation of Corrosion Publications Number 12* (*Division News*), February, insert.
Review of the book *The Molecular Dynamics of Liquid Crystals* (*Division News*), March.
Review of the book *Nanophase Materials—Synthesis, Properties, Applications* (*Division News*), February.
Review of the book *Powder Metallurgy Science* (*Division News*), February.
Review of the book *Principles of Ceramics Processing, Second Edition* (*Division News*), February.
Review of the book *Resources of the Earth: Origin, Use, and Environmental Impact, Second Edition* (*Division News*), August.
Review of the book *Steelmakers and Knotted String* (*Division News*), August.
"SMD Approves Two Division Awards during Anaheim Meeting" (*SMD Edition*), June.
"SMD Council Meets in Anaheim" (*SMD Edition*), June.
"SMD Enjoys Successful TMS Fall Meeting as Part of Materials Week" (*SMD Edition*), January.
"SMD Sponsors Ten Symposia at Materials Week '96" (*SMD Edition*), June.
"Thin Films and Interfaces Committee: A Profile" (*EMPMD Edition*), March.
"TMS Fall Extractive Meeting Focuses on Waste Minimization" (*EPD Edition*), August.
"TMS Sponsors Session at Alumitech '97" (*LMD Edition*), November.

Economics

"AAES Releases Engineering Salary Data for 1995" (*Professional Affairs*), T.M. Beazley, April, pp. 14–15.
"Al and the Dynamics of Change" (*Economics*), G.T. Haymaker, Jr., May, pp. 16–18.
"Analyzing the Methods and Merits of Recycling Fiber Metal Laminates" (*1996 Review of Extraction & Processing*), E. Tempelman, W.L. Dalmijn, and A. Vlot, April, pp. 62–64.
"The Global Aluminum Industry: Policy and Market Issues" (*Economics*), A. Born, August, pp. 22–23.
"The Integration of Process and Cost Modeling—A Powerful Tool for Business Planning" (*Overview*), J. Szekely, J. Busch, and G. Trapaga, December, pp. 43–47.
"Materials Manufacturing Industries—A Taxonomy and Analysis" (*Economics*), P.S. Follansbee, January, pp. 10–13. <http://www.tms.org/pubs/journals/JOM/9601/Follansbee-9601.html>
"MMCs for Automotive Engine Applications" (*Economics*), C.G.E. Mangin, J.A. Isaacs, and J.P. Clark, February, pp.

49–51.
"Steel vs. Plastics: The Competition for Light-Vehicle Fuel Tanks" (*Overview*), P.J. Alvarado, July, pp. 22–25. <http://www.tms.org/pubs/journals/JOM/9607/Alvarado-9607.html>

Education

"Engineering Criteria 2000: The ABET Vision for Change" (*Education*), G.D. Peterson, September, pp. 12–14.
"Global Trends in Engineering Practice and Education" (*Education*), A. Meisen, August, pp. 16–19.
"The New Engineering Accreditation Process in Mexico" (*Education*), F. Ocampo, October, pp. 16–17.

Electronic Materials

"Characterizing and Etching Blue-Light Emitting Semiconductor Materials" (*Commentary*), J.M. Parsey, Jr., and M.S. Goorsky, August, p. 45.
"The Dry Etching of Group III-Nitride Wide-Bandgap Semiconductors" (*Overview*), H.P. Gillis, D.A. Choutov, and K.P. Martin, August, pp. 50–55.
"A Lower-Melting-Point Solder Alloy for Surface Mounts" (*Research Summary*), M.T. McCormack, Y. Degani, H.S. Chen, and W.R. Gesick, May, pp. 54–56. <http://www.tms.org/pubs/journals/JOM/9605/McCormack-9605.html>
"The Luminescence Characteristics of GaN Heteroepitaxial Films" (*Research Summary*), P.A. Grudowski, A.L. Holmes, C.J. Eiting, and R.D. Dupuis, August, pp. 46–49.
"The Mechanical Behavior of Interconnect Materials for Electronic Packaging" (*Research Summary*), D.R. Frear, May, pp. 49–53.
"The Metallurgical Control of Electromigration Failure in Narrow Conducting Lines" (*Overview*), J.W. Morris, Jr., C.-U. Kim, and S.H. Kang, May, pp. 43–46.

Environment

"Alternatives to Thorium Additions to Tungsten-Based Materials" (*Overview*), P. Paschen, January, pp. 45–47.
"Electric Car Batteries: Avoiding the Environmental Drawbacks via Alternative Technologies" (*Overview*), H. Warlimont and M. Olper, July, pp. 32–34.
"The Environmental Impact of Steel and Aluminum Body-in-Whites" (*Overview*), H.N. Han, February, pp. 33–38.
"Stabilizing Toxic Metal Concentrates by Using SMITE" (*Overview*), T. White and I. Toor, March, pp. 54–58.

High-Temperature Alloys

"EB-PVD Technology in the Gas Turbine Industry: Present and Future" (*Overview*), B.A. Movchan, November, pp. 40–45.
"The Fatigue and Fracture of Turbine Blade Alloys in High-Pressure Hydrogen" (*Research Summary*), D.P. DeLuca and B.A. Cowles, November, pp. 61–64.
"The In-Service Degradation of Corrosion-Resistant Coatings" (*Research Summary*), N.S. Cheruvu, T.J. Carr, J. Dworak, and J. Coyle, May, pp. 34–38.
"Reviewing Sulfidation Corrosion—Yesterday and Today" (*Overview*), N.S. Bornstein, November, pp. 37–39.
"The SCC Testing of Nuclear Steam Generator Tubing Materials" (*Research Summary*), P.E. Doherty, J.M. Sarver, and B.P. Miglin, May, pp. 39–41.

Intermetallics

"The Development of Nb-Based Advanced Intermetallic Alloys for Structural Applications" (*Overview*), P.R. Subramanian, M.G. Mendiratta, and D.M. Dimiduk, January, pp. 33–38.
"The Fracture Behavior of Diffusion-Bonded Duplex Gamma TiAl" (*Research Summary*), G. Çam, K.-H. Bohm, J. Müllauer, and M. Koçak, November, pp. 66–68.
"The Fracture Resistance and Crack-Tip Micromechanics of In-Situ Intermetallic Composites" (*Research Summary*), K.S. Chan and D.L. Davidson, September, pp. 62–67.
"High-Temperature Refractory Metal-Intermetallic Composites" (*Overview*), M.R. Jackson, B.P. Bewlay, R.G. Rowe, D.W. Skelly, and H.A. Lipsitt, January, pp. 39–44.
"Let's Be Upbeat on Advanced Materials!" (*Commentary*), F.H. Froes, July, p. 35.
"Microscopic Studies on Hydrogen Effects on Mechanical Properties" (*Overview*), I.M. Robertson and D. Teter, November, pp. 55–60.
"Microstructural Control in a Gamma-TiAl Alloy by MA and HIPing" (*Research Summary*), N. Hoo, P.S. Goodwin, R.M. Brydson, P. Tsakiropoulos, C.M. Ward-Close, and F.H. Froes, July, pp. 40–41.
"The Oxidation and Protection of Gamma Titanium Aluminides" (*Overview*), M.P. Brady, W.J. Brindley, J.L. Smialek, and I.E. Locci, November, pp. 46–50.
"Recent Advances in the Thermohydrogen Processing of Titanium Alloys" (*Overview*), O.N. Senkov, J.J. Jonas, and F.H. Froes, July, pp. 42–47.

Iron & Steel

"The Application of High-Strength, Hot-Rolled Steels in Auto Wheels" (*Research Summary*), G. Marron and P. Teracher, July, pp. 16–20.
"Bessie Bessemer Furnace and Old Man Steel Re-educate with Performance Steelmaking" (*METALLURGRAPHICS: Special Edition*), T.M. Beazley, October, pp. 12–14. <http://www.tms.org/pubs/journals/JOM/9610/Beazley-9610.html>
"Car Wars: Steelmakers Strike Back" (*Commentary*), K. Taylor, July, p. 12.
"Cold-Rolled, High-Strength Sheet Steels for Auto Applications" (*Overview*), W. Bleck, July, pp. 26–30.
"The Environmental Impact of Steel and Aluminum Body-in-Whites" (*Overview*), H.N. Han, February, pp. 33–38.
"Estimating the Oxygen Potentials of Metallurgical Slags" (*Overview*), J.W. Matousek, December, pp. 52–53.
"Events and Trends in Metal and Mineral Commodities" (*1996 Review of Extraction & Processing*), T.M. Beazley, April, pp. 45–49.
"High-Nitrogen Austenitic Stainless Steels with High Strength and Corrosion Resistance" (*Design*), G.O. Rhodes and J.J. Conway, April, pp. 28–31.
"The P/M Processing of High-Nitrogen Stainless Steels" (*Overview*), J.W. Simmons, W.E. Kemp, and J.S. Dunning, April, pp. 20–23.
"A Steel Response to 'The Environmental Impact of Steel and Aluminum Body-in-Whites'," R. Dworek, July, p. 31.
"Steel vs. Plastics: The Competition for Light-Vehicle Fuel Tanks" (*Overview*), P.J. Alvarado, July, pp. 22–25. <http://www.tms.org/pubs/journals/JOM/9607/Alvarado-9607.html>
"The UltraLight Steel Auto Body Program Completes Phase I" (*Overview*), M.J. Crooks and R.E. Miner, July, pp. 13–15.
"Using Stainless Steel to Portray a Slice of American History" (*METALLURGRAPHICS*), T.M. Beazley, June, p. 60.

Joining

"The Active Metal Brazing of TZM-Mo and SiN Ceramics" (*Research Summary*), J.J. Stephens, P.T. Vianco, and F.M. Hosking, January, pp. 54–58.
"Joining Ductile Refractory Metal Inserts in X-Ray Tube Targets" (*Design*), M.R. Eggleston, M.R. Jackson, M.G. Benz, and G. Reznikov, January, pp. 59–64.
"Joining Silicon Nitride to Itself and to Metals" (*Overview*), S.D. Peteves, G. Ceccone, M. Paulasto, V. Stamos, and P. Yvon, January, pp. 48–52, 74–77.
"A Lower-Melting-Point Solder Alloy for Surface Mounts" (*Research Summary*), M.T. McCormack, Y. Degani, H.S. Chen, and W.R. Gesick, May, pp. 54–56. <http://www.tms.org/pubs/journals/JOM/9605/McCormack-9605.html>
"The Mechanical Behavior of Interconnect Materials for Electronic Packaging" (*Research Summary*), D.R. Frear, May, pp. 49–53.
"The Metallurgical Control of Electromigration Failure in Narrow Conducting Lines" (*Overview*), J.W. Morris, Jr., C.-U. Kim, and S.H. Kang, May, pp. 43–46.
"Refractory Metals and Materials: Joining and Applications" (*Commentary*), P.R. Subramanian and J.A. Shields, Jr., January, p. 32.

Lead, Zinc, Tin

"Electric Car Batteries: Avoiding the Environmental Drawbacks via Alternative Technologies" (*Overview*), H. Warlimont and M. Olper, July, pp. 32–34.
"Events and Trends in Metal and Mineral Commodities" (*1996 Review of Extraction & Processing*), T.M. Beazley, April, pp. 45–49.
"Extracting Zinc from Oxidized Minerals via an Induction Furnace" (*Research Summary*), Z. Szczygiel, S. Escobedo, G. Gonzalez, J.L. Serrano, and A. Gonzalez, January, pp. 22–24.
"Industrial-Scale Leadmaking with the QSL Continuous Oxygen Converter" (*1996 Review of Extraction & Processing*), P.E. Queneau and A. Siegmund, April, pp. 38–44.
"A Lower-Melting-Point Solder Alloy for Surface Mounts" (*Research Summary*), M.T. McCormack, Y. Degani, H.S. Chen, and W.R. Gesick, May, pp. 54–56. 25
"Placid—A Clean Process for Recycling Lead from Batteries" (*Overview*), G. Díaz and D. Andrews, January, pp. 29–31.
"Recovering Metals from Red Mud by Thermal Treatment and Magnetic Separation" (*Research Summary*), P. Plescia and D. Maccari, January, pp. 25–28.

Lightweight Materials

"Analyzing Superplastic Microstructures Using Interactive EBSP Methods" (*Testing & Analysis*), T.R. McNelley and M.E. McMahon, February, pp. 58–60.
"Events and Trends in Metal and Mineral Commodities" (*1996 Review of Extraction & Processing*), T.M. Beazley, April, pp. 45–49.
"Inclusions in Molten Magnesium and Potential Assessment Techniques" (*Overview*), H. Hu and A. Luo, October, pp. 47–51.
"A New Electrolytic Magnesium Production Process" (*Overview*), R.A. Sharma, October, pp. 39–43.
"The Processing and Application of Mg and Ti: What's New" (*Commentary*), G.J. Kipouros, October, p. 36.
"The Recycling of Magnesium Makes ¢ents" (*Overview*), L. Riopelle, October, pp. 44–46.

Manufacturing

"The Development of 5XXX Aluminum Alloys for RCS Applications" (*Overview*), J.K. McBride, R.E. Sanders, Jr., and H.G. Reavis, June, pp. 18–21.
"Developments in the Packaging of Aluminum Alloys" (*Commentary*), J.G. Morris, June, p. 17.
"Economically Producing Reactive Metals by Aerosol Reduction" (*Overview*), J.D. Leland, October, pp. 52–55.
"Good Morale: The Key to Outstanding Operation Results" (*Industrial Insight*), O. Knaisch, May, pp. 19–21.
"Industrial-Scale Leadmaking with the QSL Continuous Oxygen Converter" (*1996 Review of Extraction & Processing*), P.E. Queneau and A. Siegmund, April, pp. 38–44.
"The Integration of Process and Cost Modeling—A Powerful Tool for Business Planning" (*Overview*), J. Szekely, J. Busch, and G. Trapaga, December, pp. 43–47.
"The Intelligent Supervisory Control of Submerged-Arc Furnaces" (*Applied Technology*), M.A. Reuter, C. Pretorius, C. West, P. Dixon, and M. Oosthuizen, December, pp. 49–51.
"Materials Manufacturing Industries—A Taxonomy and Analysis" (*Economics*), P.S. Follansbee, January, pp. 10–13. <http://www.tms.org/pubs/journals/JOM/9601/Follansbee-9601.html>
"The Single-Step Preheating of AA3104 Can-Body Stock Ingots" (*Research Summary*), S.L. Palmer and Z. Li, June, pp. 30–33.
"Today's Best Practices—Stimulating and Stabilizing Change (*1996 Review of Extraction & Processing*), G.A. Eltringham, April, pp. 34–37.
"The UltraLight Steel Auto Body Program Completes Phase I" (*Overview*), M.J. Crooks and R.E. Miner, July, pp. 13–15.

Material Matters

"Double Patenting—One Patent per Invention," A.B. Silverman, June, p. 67. <http://www.tms.org/pubs/journals/JOM/matters/matters-9606.html>
"Making a Federal Case Out of It: U.S. Patent Infringement," A.B. Silverman, March, p. 72. <http://www.tms.org/pubs/journals/JOM/matters/matters-9603.html>
"Not All Copyright Infringement Results in Liability," D.V. Radack, February, p. 74. <http://www.tms.org/pubs/journals/JOM/matters/matters-9602.html>
"Trademark Infringement and Dilution Aspects of Unfair Competition Law," D.V. Radack, October, p. 64. <http://www.tms.org/pubs/journals/JOM/matters/matters-9610.html>
"Understanding 'Patentese'—A Patent Glossary," A.B. Silverman and G.K. Stacey, September, pp. 77–79. <http://www.tms.org/pubs/journals/JOM/matters/matters-9609.html>
"What You Don't Know About the Internet Can Hurt You," A.B. Silverman, July, p. 72. <http://www.tms.org/pubs/journals/JOM/matters/matters-9607.html>
"Who Owns Copyrighted Work—Employer, Employee, Consultant?," D.V. Radack, August, p. 60. <http://www.tms.org/pubs/journals/JOM/matters/matters-9608.html>

Mechanical Properties

"The Application of High-Strength, Hot-Rolled Steels in Auto Wheels" (*Research Summary*), G. Marron and P. Teracher, July, pp. 16–20.
"The Development of Nb-Based Advanced Intermetallic Alloys for Structural Applications" (*Overview*), P.R. Subramanian, M.G. Mendiratta, and D.M. Dimiduk, January, pp. 33–38.
"Enhancing the Mechanical Properties of Titanium Alloys with Rapid Heat Treatment" (*Overview*), O.M. Ivasishin and P.E. Markovsky, July, pp. 48–52.
"The Fracture Resistance and Crack-Tip Micromechanics of In-Situ Intermetallic Composites" (*Research Summary*), K.S. Chan and D.L. Davidson, September, pp. 62–67.29.1
"The Metallurgical Control of Electromigration Failure in Narrow Conducting Lines" (*Overview*), J.W. Morris, Jr., C.-U. Kim, and S.H. Kang, May, pp. 43–46.
"High-Temperature Refractory Metal-Intermetallic Composites" (*Overview*), M.R. Jackson, B.P. Bewlay, R.G. Rowe, D.W. Skelly, and H.A. Lipsitt, January, pp. 39–44.
"The Mechanical Behavior of Interconnect Materials for Electronic Packaging" (*Research Summary*), D.R. Frear, May, pp. 49–53.
"The Metallurgical Control of Electromigration Failure in Narrow Conducting Lines" (*Overview*), J.W. Morris, Jr., C.-U. Kim, and S.H. Kang, May, pp. 43–46.
"The Micromechanical Modeling of Polymeric Composites" (*Overview*), T.-W. Chou, S.L. Phoenix, and J.A. Nairn, September, pp. 53–57.
"Microscopic Studies on Hydrogen Effects on Mechanical Properties" (*Overview*), I.M. Robertson and D. Teter, November, pp. 55–60.
"Microstructure-Property Relationships in O-Temper Foil Alloys" (*Research Summary*), G.J. Mahon and G.J. Marshall, June, pp. 39–42.
"A Model for Predicting Micromechanical Interfacial Adhesion in Polymer Composites" (*Testing & Analysis*), H.F. Wu, W. Gu, and G.-Q. Lu, September, pp. 58–61.
"Modeling the Micromechanical Aspects of Composites" (*Commentary*), P.K. Liaw and N. Yu, September, p. 43.
"The Selection, Specification, and Performance of Metals in Architecture" (*METALLURGRAPHICS: Special Edition*), L.W. Zahner, March, pp. 14–15.

Melting & Refining

"Designing Furnaces for the Primary Aluminum Industry"

(*Design*), C. Schmitz, February, pp. 18–20, 22–23.
"Evaluating Ceramic-Foam and Bonded-Particle Cartridge Filtration Systems" (*Research Summary*), N.J. Keegan, W. Schneider, H.P. Krug, J. Moritz, M. Stoltz, and V. Dopp, August, pp. 28–30.
"Inclusions in Molten Magnesium and Potential Assessment Techniques" (*Overview*), H. Hu and A. Luo, October, pp. 47–51.
"The Kennecott Utah Copper Refinery Modernization" (*Overview*), K.E. Sutliff, T.I. Probert, and C.T. Unger (Part I) and J.E. Hoffmann, K.E. Sutliff, B.A. Wells, and D.B. George (Part II), August, pp. 42–44.

Modeling & Simulation

"Advances in the Computational Modeling of Thermal-Plasma Processing" (*Overview*), C.H. Chang and E. Pfender, June, pp. 46–48.
"Analyzing Unidirectional Solidification for a Co-Cr-Mo Biomedical Alloy by FEA" (*Research Summary*), H. Hooputra, H.M. Tensi, H. Mayr, and L. Michaelsen, March, pp. 30–33.
"Atomic-Scale Modeling of Radiation Damage by SAS" (*Overview*), H.L. Heinisch, December, pp. 38–41.
"Benchmark Testing the Flow and Solidification Modeling of Al Castings" (*Overview*), B. Sirrell, M. Holliday, and J. Campbell, March, pp. 20–23. <http://www.tms.org/pubs/journals/JOM/9603/Sirrell-9603.html>
"Clay Alumina Brick Used in Anode Baking Furnaces" (*Overview*), G.F. Corliss and M.A. Stett, November, pp. 29–32.
"The Computer-Aided Analysis of Directional Solidification Processes" (*Overview*), W. Shyy, March, pp. 24–29.
"The Continuum Field Approach to Modeling Microstructural Evolution" (*Overview*), L.-Q. Chen and Y. Wang, December, pp. 13–18.
"Diffusivities from the Calculation and Measurement of Radiation Kinetics" (*Research Summary*), E.P. Simonen, December, pp. 34–37.
"Estimating the Oxygen Potentials of Metallurgical Slags" (*Overview*), J.W. Matousek, December, pp. 52–53.
"The Integration of Process and Cost Modeling—A Powerful Tool for Business Planning" (*Overview*), J. Szekely, J. Busch, and G. Trapaga, December, pp. 43–47.
"Materials Concepts Using *Mathcad* Part VI: Principal Stress Contours in the Vicinity of a Crack under Stress" (*Forum Features*), K.J. Bowman, March, pp. 70–71.
"Materials Concepts Using *Mathcad* Part VII: Probability of Brittle Failure and the Weibull Modulus" (*Forum Features*), K.J. Bowman, June, pp. 68–69.
"Mathematically Modeling Mesoscale Microstructural Evolution" (*Commentary*), B. Pletka and L.-Q. Chen, December, p. 12.
"The Micromechanical Modeling of Polymeric Composites" (*Overview*), T.-W. Chou, S.L. Phoenix, and J.A. Nairn, September, pp. 53–57.
"A Model for Predicting Micromechanical Interfacial Adhesion in Polymer Composites" (*Testing & Analysis*), H.F. Wu, W. Gu, and G.-Q. Lu, September, pp. 58–61.
"Modeling Mechanical Alloying: Advances and Challenges" (*Overview*), B.B. Khina and F.H. Froes, July, pp. 36–38.
"Primary Damage Formation in Irradiated Materials" (*Overview*), R.E. Stoller, December, pp. 23–27.
"The Reaction Rate Theory of Radiation Effects" (*Overview*), L.K. Mansur, December, pp. 28–32.
"Sensor Principles and Methods for Measuring Physical Properties" (*Overview*), A.G. Jackson, S.J.P. Laube, and J. Busbee, September, pp. 16–23.
"The Simulation of Acoustic Emission for Metal Forging" (*Testing & Analysis*), W.M. Mullins, R.D. Irwin, S. Venugopal, and J.C. Malas, September, pp. 35–37.
"Software for Process Analysis and Design," Sidebar to "Recycling of Metals and Engineered Materials" (*Conference Review*), A. Morris and D. Robertson, March, p. 44.
"A Strategy for Experimentation and Data Analysis Using a PC" (*Overview*), C.I. Whitman, March, pp. 17–18.
"Thermodynamic Driving Forces and Anisotropic Interface Motion" (*Overview*), J. Taylor, December, pp. 19–22.

Net Trans

"The American Iron and Steel Institute Launches Steel Works" (*Net Trans*), J.J. Robinson, August, p. 15.
"It's a Small Web After All: Sizing Up Some Microscopy Sites" (*Net Trans*), J.J. Robinson, May, p. 11.
"A Review of the Aluminum Association WWW Site" (*Net Trans*), T.M. Beazley, November, p. 18.
"A Review of the Aluminum Industry WWW Server" (*Net Trans*), J.J. Robinson, April, p. 12.
"A Review of the ArtMetal Project" (*Net Trans*), T.M. Beazley, July, p. 11.
Review of the book *The Internet for Scientists and Engineers* (*Net Trans*), June, p. 13.
"A Review of Metal-Finishing.COM" (*Net TranS*), J.J. Robinson, June, p. 13.

News & Update

"Advanced Technology Program Draws Broad Support," November, p. 16.
"Alcoa Electronic Packaging Announces Layoffs," March, p. 12.
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"Aluminum Extruders Survey Compares Wages and Benefits," April, p. 7.
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"American Superconductor Successfully Demonstrates Two Prototypes and Plans Commercialization," January, p. 8.
"Americans Recycle Nearly 63 Billion Aluminum Cans in 1995," June, p. 8.
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"Analysts Forecast Increasing Demand for Metals Cans," March, p. 6.
"Analysts Predict Castings, Forgings, and Powder Metals Market to Grow by 2000," April, p. 8.
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"Battelle Forecasts Modest Increase in R&D Investment for 1996," March, p. 13.
"Battelle Forecasts Top Ten Technologies and Products for the Next Decade" (*The Reporter*), April, p. 11.
"Bethlehem Steel Receives U.S. Patent for High-Speed Tin Plating Process," October, p. 7.
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"BMDO Electronic Materials Update," February, p. 12.
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"Collaborative Agreement Enables Institute to Recycle Industrial Waste," January, p. 4.
"Committee Forum Discusses Materials-Related R&D" (*The Reporter*), October, p. 10.
"Committee Recommends Against Restricting Access to U.S. R&D," July, p. 10.
"Commodities Update: U.S. Edition," January, p. 4.
"Companies Announce Joint Plans for SPL Pilot Plant Construction," February, p. 5.
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"Competition in Automotive Market is Child's Play for Newest Contender," May, p. 6.
"Computer Aids Scientists in Designing Superhard Material," March, p. 9.
"Consortium Studies Methods for Better Chip Measurement," July, p. 9.
"Cooperative Program Develops New Ceramic," January, p. 6.
"Corporate Executive Predicts Lead Industry Consolidation in Next Decade," April, p. 6.
"Council for Automotive Research Holds Chassis Workshop," July, p. 8.
"Council for Competitiveness Urges New Approaches to Government-Industry Partnerships" (*The Reporter*), June, p. 12.
"CRA Releases Report on Magnesium's Future in Automotive Components," April, p. 9.
"CRADA Develops Prototype Emission Monitor for Stack Gas Uses," September, p. 4.
"CRADA Partners Produce a High-T_c Superconducting Bolometer," October, p. 9.
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"EPA Studies New Air Quality Standards for Particulate Matter," July, p. 5.
"EPMA Honors Powder Metallurgy Achievements" (*The Reporter*), January, p. 6.
"European P/M Association Receives Funding for Process Modeling Network," February, p. 8.
"EWC Forecasts High Number of Job Openings in the Next Decade," June, p. 12.
"Executive Predicts Consumption to Outweigh Supply of Nickel," January, p. 4.
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"IISI Secretary Predicts Growth in World Steel Consumption," November, p. 8.
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"International Participation in U.S. Doctoral Engineering Programs Peaks," April, p. 11.
"International Steering Committee Promotes Open Trade Policy for High-Technology Industry (*The Reporter*), December, p. 75.
"JCRM Operates Demonstration Plant for Beverage Container Sorting Technology," March, p. 6.
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"MIT Teams Develop Technology for CO_2-Free Iron Production," May, p. 4.
"More than One Million Graduates Receive Engineering Degrees Annually" (*The Reporter*), March, p. 13.
"Motorola Semiconductors Purchases Waste Minimization System," February, p. 13.
"MPIF Announces Powder Metallurgy Parts-of-the-Year Winners" (*The Reporter*), August, p. 10.
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"New Web Sites Offer Information on Microscopy and Other Analytical Techniques," January, p. 7.
"Newmont Successfully Demonstrates Bioleaching Process for Gold," February, p. 4.
"1995 Annual Report Summaries of Leading Mining Companies," December, pp. 5–6.
"The 1995 Primary Aluminum Industry: The Year in Review," August, pp. 7–9.
"NIST Announces Awards for MEP Programs," November, p. 16.
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"Oxygen Pyrometallurgy at Copper Cliff—A Half Century of Progress" (*Industrial Insight*), P.E. Queneau and S.W. Marcuson, January, pp. 14–21. <http://www.tms.org/pubs/journals/JOM/9601/Queneau-9601.html>
"The Thermal Treatment of Galvanic Sludges for Environmental Compatibility" (*Research Summary*), A.M. Bernardes, I. Bohlinger, and W. Wuth, March, pp. 59–62.

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"An Ultrasonic Sensor for High-Temperature Materials Processing" (*Testing & Analysis*), D.A. Stubbs and R.E. Dutton, September, pp. 29–31. <http://www.tms.org/pubs/journals/JOM/9609/Stubbs-9609.html>

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